

MNSTPSKLLPIDKSHSLQLQPQSSSASIFNSPTKPLNFPRTNSKPSLDPNSSSDT
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ASPKKVAFTVTNPEIHHYPDNRVEEEDQSQQKEDSVEPPLIQHQWKDPSQFNYS
DEDTNASVPPTPPLHTTKPTFAQLLNKNNEVNSEPEALTMKCLKRENFSNLSLDE
KVNLYLSPTNNNNNSKNVSDMDSHLQNLQDASKNKTNENIHNLSFALKAPKNDIEN
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DSFDRSYNHTEQSILNLLNSASQSQISLNALEKQRQTQEQEQTQAAEPEEETSFS
DNIKVKQEPKSNLEFVKVTIKKEPVSATEIKAPKREFSSRILRIKNEDEIAEPADIHP
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KSLEDPANNESLQQQLEVPHTKEDDSILANSSNIAPPEELTLPVVEANDYSSFND
VTKTFDAYSSFEESLSREHETDSKPINFISIWHKQEKQKKHQIHKVPTKQIIASYQQ
YKNEQESRVTSQKVKIPNAIQFKKFKEVNVMSRRVSPDMDDLNVSQFLPELSE
DSGFKDLNFANYSNNTNRPRSFTPLSTKNVLSNIDNDPNVVEPPEPKSYAEIRNA
RRLSANKAAPNQAPPLPPQRQPSSTRSNSNKRVSFRVPTFEIRRTSSALAPCD
MYNDIFDDFGAGSKPTIKAEGMKTLPMDKDDVKRILNAKKGVTQDEYINAKLVD
QKPKKNSIVTDPEDRYEELQQTASIHNATIDSSYGRPDSISTDMLPYLSDELKKP
PTALLSADRLFMEQEVHPLRSNSVLVHPGAGAATNSSMLPEPDFELINSPARNVS
NNSDNVAISGNASTISFNQLDMNFDDQATIGQKIQEQPASKSANTVRGDDDGLA
SAPETPRTPTKKESISSKPAKLSSASPRKSPIKIGSPVRVIKNGSIAGIEPIPKATH
KPKKSFQGNEISNHKVRDGGISPSSGSEHQHNPSMVSVP SQYTDATSTVPDE
NKDVQHKPREKQKQKHHHRHHHHHHKQKTDIPGVVDDEIPDVGLQERGKLFRR
VLGIKNINLPDINTHKGRFTLTLDNGVHCVTTPPEYNMDDHNVAIGKEFELTVADSL
EFILTLKASYEKPRGTLVEVTEKKVVKSRNRLSRLFGSKDIITTKFVPTVEVKDTWA
NKFAPDGSFARCYIDLQQFEDQITGKASQFDLNCFNWETMSNGNQPMKRGKP
YKIAQLEVKMLYVPRSDPREILPTSIRSAYESINELNNEQN NYFEGYLHQEGGDC
PIFKKRFFKLMGTSLLAHSEISHKTRAKINLSKVVDLIYVDKENIDRSNHRNFSVL
LLDHAFKIKFANGELIDFCAPNKHEMKIWIQNLQEIIYRNRFRRRQPWWNLMLQQQ
QQQQQQQSSQQ

FIGURE 1

1 cccaaaaaag ataaaaataaa aacaaaaacaa aacaaaaagta ctaacaaatt attgaaactt
61 ttaattttta ataaagaatc agtagatcta ttgtaaaag aatgaactc aactccaagt
121 aaattattac cगतगताा acattctcat ttacaattac agcctcaatc gtctcggca
181 tcaatattta attccccaac aaaaccattg aatttcccca gaacaaattc caagccgagt
241 ttगतccaa attcaagctc tgatacctac actagcgaac aagatcaaga gaaagggaaa
301 gaagagaaaa aggacacagc ctttcaaaca tctttgata gaaatttga tcttgataat
361 tcaatcgata tacaacaaac aattcaacat cagcaacaac agccacaaca acaacaacaa
421 ctctcacaaa ccgacaataa ttaattgat gaattttctt tcaaacacc gatgactcg
481 actttagacc taaccaagca aaatccaact gtggacaaaag tgaatgaaaa tcatgcacca
541 acttatataa atacctcccc caacaaatca ataataaaaa aggcaactcc taaagcgta
601 cctaaaaaag ttgcatttac tgaactaat cccgaaattc atcattatcc agataataga
661 gtcgaggaag aagatcaaag tcaacaaaaa gaagattcag ttgagccacc ctaatacaaa
721 catcaatgga aagatccttc tcaattcaat tattctgatg aagatacaaaa tgcttcagtt
781 ccaccaacac caccacttca tacgacgaaa cctacttttg cgcaattatt gaacaaaaac
841 aacgaagtca atctggaacc agaggcattg acagatatga aattaaagcg cgaaaatttc
901 agcaatttat cattagatga aaaagtcaat ttatatctta gtcccactaa taataacaat
961 agtaagaatg tctcagatat ggatctgcat ttacaaaact tgcaagacgc ttcgaaaaac
1021 aaaactaatg aaaatattca caatttgta tttgctttaa aagcaccaaa gaatgatatt
1081 gaaaacccat taaactcatt gactaacgca gatattctgt taagatcatc tggatcatca
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1201 cctaagaagg ttaactctgg attgtctttg aatgacggca taaaggggtt ctctgatgag
1261 gttgttgaat cattacttcc tcgtgactta tctcgagaca aattagagac taaaaagaa
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1981 cagacttctg atattattgg tgacaaatat ggaaactcat caagtgaaat aaccaccaaaa
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2101 ccagctaata atgaatcatt gcaacaacaa ttggaggtag cgcatacaaa agaagatgat
2161 agcattttag ccaactcgtc caatattgct ccacctgaag aattgacttt gcccgtagtg
2221 gaagcaaattg attattcatc ttttaatgac gtgaccaaaa cttttgatgc atactcaagc
2281 tttgaagagt cattatctag agagcacgaa actgattcaa aaccaattaa ttcatatca
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2401 atcattgcta gttatcaaca atacaaaaac gaacaagaat ctctgtttac tagtgataaa
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2521 agagtgttta gtccagacat ggatgatttg aatgtatctc aatttttacc agaattatct
2581 gaagactctg gatttaaaga ttgaatttt gccaaactact ccaataacac caacagacca
2641 agaagtttta ctcaattgag cactaaaaat gtctgtcga atattgataa cgatccta

FIGURE 2A

2701 gttgtgaac ctctgaacc gaaatcatat gctgaaatta gaaatgctag acggttatca
 2761 gctaataagg cagcgccaaa tcaggcacca ccattgccac cacaacgaca accatctca
 2821 actcgtcca attcaaataa acgagtgtcc agatttagag tgcccacatt tgaaattaga
 2881 agaacttct cagcattagc acctgtgac atgtataatg atattttga tgatttcggt
 2941 gcgggttcta aaccaactat aaaggcagaa ggaatgaaaa cattgccaaag tatggataaa
 3001 gatgatgtca agaggatttt gaatgcaaag aaagggtgta ctcaagatga atatataat
 3061 gccaaacttg ttgatcaaaa acctaaaaag aattcaattg tcaccgatcc cgaagaccga
 3121 tatgaagaat tacaacaaac tgccctata cacaatgcc ccattgattc aagtattat
 3181 ggccgaccag actccatttc taccgacatg ttgcctatc ttagtatga attgaaaaa
 3241 ccacctacgg ctctattatc tctgatcgt ttgttatgg aacaagaagt acatccgtta
 3301 agatcaaact ctgttttgt tcaccagggg gcaggagcag caactaattc tcaatgtta
 3361 ccagagccag atttgaatt aatcaattca cctgctagaa atgtgctgaa caacagtgt
 3421 aatgtcgcca tcagtggtaa tgctagtact attagttta accaattgga tatgaattt
 3481 gatgaccaag ctacaattgg tcaaaaaatc caagagcaac ctgctcaaa atccgccaat
 3541 actgtctgtg gtgatgatga tggattggcc agtgcacctg aaacaccaag aactctacc
 3601 aaaaaggagt ccatatcaag caagcctgcc aagcttctt ctgcctccc tagaaaatca
 3661 ccaattaaga ttggttcacc agtctgagtt attagaaaa atggatcaat tctggcatt
 3721 gaaccaatcc caaaagccac tcacaaaccg aagaaatcat tccaaggaaa cgagatttca
 3781 aaccataaag tacgagatgg tggaatttca ccaagctccg gatcagagca tcaacagcat
 3841 aatcctagta tggttctgt tcttcacag tatactgatg ctacttcaac ggttcagat
 3901 gaaaacaaag atgtcaaca caagcctcgt gaaaagcaaa agcaaaagca tcaccatgc
 3961 catcatcatc atcatcataa acaaaaaact gatattccgg gtgtgttga tgatgaatt
 4021 cctgatgtag gattacaaga acgaggcaaa ttattctta gagtttagg aattaagaat
 4081 atcaatttac ccgatattaa tactacaaa ggaagattca cttaacgtt ggataatgga
 4141 gtgcattgtg ttactacacc agaatacaac atggacgacc ataattgtgc cataggttaa
 4201 gaatttgagt tgacagtgc tgattcatta gagttattt taacttgaa ggcacatcat
 4261 gaaaaacctc gtgttacatt agtagaagtg actgaaaaga aagttgtcaa atcaagaaat
 4321 agattgagtc gattatttgg atcgaaagat attatcacca cgacaaagt ttgtcccact
 4381 gaagtcaaag atacctgggc taataagttt gctcctgatg gttcatttgc tagatgttac
 4441 attgatttac aacaatttga agacaaatc accggtaaag catcacagtt tgatctcaat
 4501 tgttttaag aatgggaaac tatgagtaat ggcaatcaac caatgaaaag aggcaaacct
 4561 tataagattg ctcaattgga agttaaatg ttgtatgtc eacgatcaga tccaagagaa
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 4681 aataattact ttgaagggtt ttacatcaa gaaggaggtg attgtccaat tttaagaaa
 4741 cgtttttca aattaatggg cacttctta ttggctcata gtgaaatc tcataaaact
 4801 agagccaaaa ttaattatc aaaagtgtt gatttgatt atgttgataa agaaaacatt
 4861 gatcgtcca atcatcgaaa tticagtgt gtgtattgt tggatcatgc attcaaaatc
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 5041 aatttgatgc ttcaacaaca acaacaaca caacaacaac aaagctccca acagtaattg
 5101 aaaggcttac tttgatatt tttaattt attggcaaat atatgccc atttgtattat
 5161 cttttagtct aatagcgtt tctttttc cagt

FIGURE 2B

Activation of "Subtilisin-like" Proprotein Convertases

Signal peptide	<u>Propeptide</u> Xn-K/R	Inactive Subtilisin D H N S	<u>P-Domain</u> D - H - N <RGD> S Substrate = K/R↓
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The processing or "P-domain" clips the propeptide at the carboxy terminal side of dibasic residues, thereby releasing the propeptide. Exposed D-H-N-S active site residues assume the subtilisin serine protease conformation.

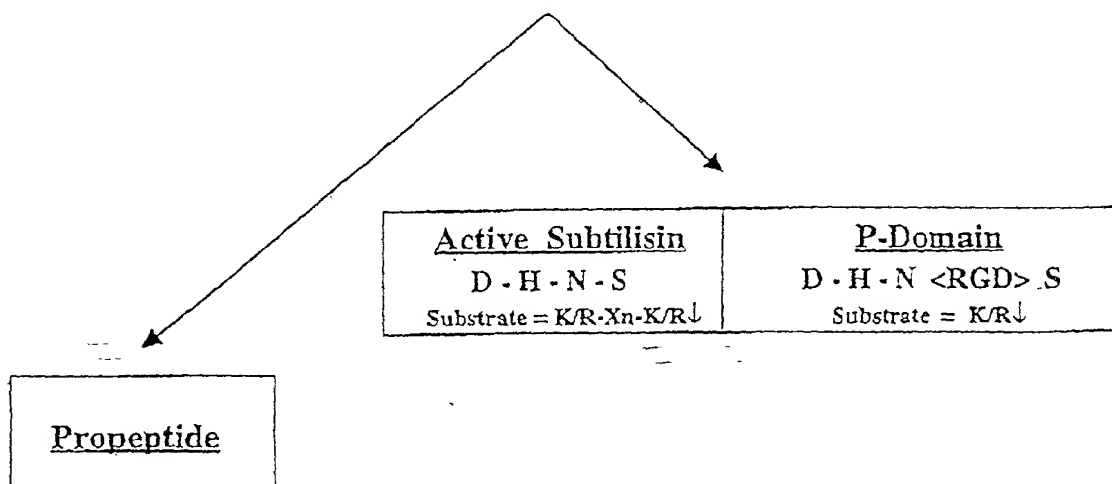


FIG. 3

Amino terminal processing of Int1p

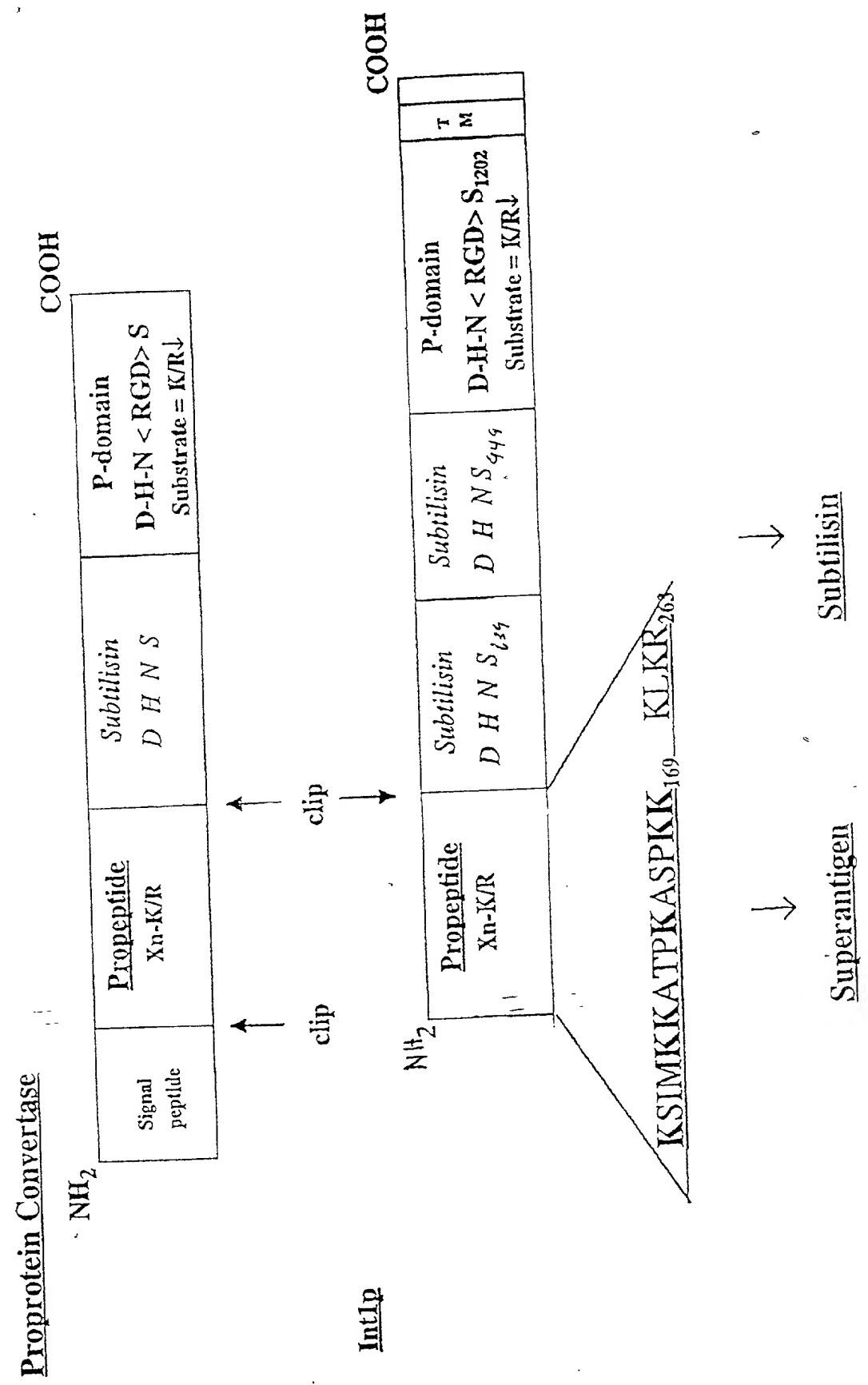


FIG 4.

P Domain Subtilisin Motifs

<u>Kex2</u>	<u>D</u> ₁₇₉	<u>H</u> ₂₁₃	<u>N</u> ₃₁₄	<u>S</u> ₃₇₈ = 199aa
			< <u>R</u> ₃₁₈ <u>GD</u> >	
<u>Furin</u>	<u>D</u> ₃₅₅	<u>H</u> ₃₉₅	<u>N</u> ₄₇₉	<u>S</u> ₅₅₅ = 200aa
			< <u>R</u> ₄₉₈ <u>GD</u> >	
<u>Int1p</u>	<u>D</u> ₁₀₂₂	<u>H</u> ₁₀₆₄	<u>N</u> ₁₁₄₆	<u>S</u> ₁₂₃₄ = 215aa
			< <u>R</u> ₁₁₄₉ <u>GD</u> >	
<u>CD18</u>	<u>D</u> ₂₉₀	<u>H</u> ₃₀₉	<u>N</u> ₃₅₁	<u>S</u> ₄₉₀ = 200aa
			< <u>R</u> ₃₉₇ <u>GD</u> >	
<u>C3</u>	<u>D</u> ₁₂₄₅	<u>H</u> ₁₂₈₉	<u>N</u> ₁₃₂₇	<u>S</u> ₁₄₃₀ = 185aa
			< <u>R</u> ₁₃₉₃ <u>GD</u> >	
<u>SpeB</u>	<u>D</u> ₁₃₅	<u>H</u> ₁₅₉	<u>N</u> ₂₉₅	<u>S</u> ₃₂₄ = 189aa
			< <u>R</u> ₃₀₇ <u>GD</u> >	
<u>Fibrillin</u>	<u>D</u> ₉₃₀	<u>H</u> ₉₇₁	<u>N</u> ₁₀₅₂	<u>S</u> ₁₁₂₉ = 199aa
			< <u>R</u> ₁₀₅₃ <u>GD</u> >	
<u>EGF</u>	<u>D</u> ₂₁₉	<u>H</u> ₂₈₆	<u>N</u> ₃₁₂	<u>S</u> ₄₀₃ = 184aa
			< <u>R</u> ₃₆₃ <u>GD</u> >	
<u>Fibronectin</u>	<u>D</u> ₁₃₆₅	<u>H</u> ₁₃₉₆	<u>N</u> ₁₄₈₈	<u>S</u> ₁₅₆₅ = 200aa
			< <u>R</u> ₁₅₆₅ <u>GD</u> >	

FIG. 5

T08260" 05019660

Comparison of the high affinity heparin-binding site of
Mycobacterium tuberculosis heparin-binding hemagglutinin
adhesin (HBHA) with the proposed heparin-binding site of
Candida albicans Int1p

HBHA	<u>K</u> ₁₈₀ AAA <u>KK</u> APA <u>KK</u> AAA <u>KK</u> ₁₉₅
Int1p	<u>K</u> ₁₅₅ SIM <u>KK</u> ATP <u>K</u> ASP <u>KK</u> ₁₆₉

FIG. 6

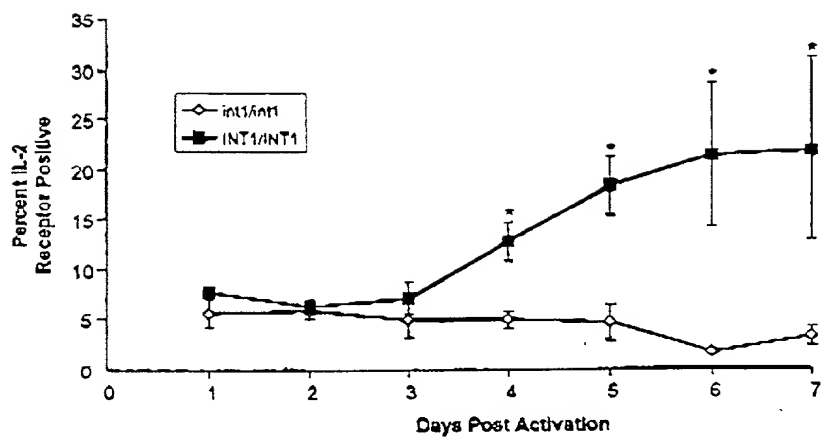


FIG 7

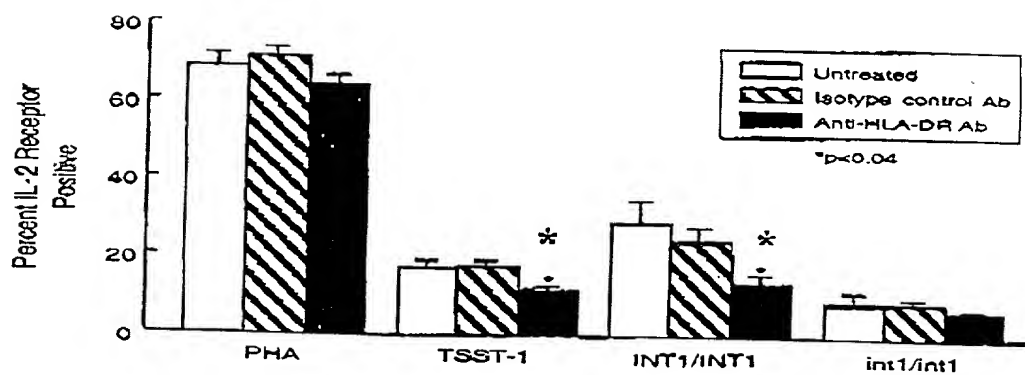


FIG 8

09964858-092804

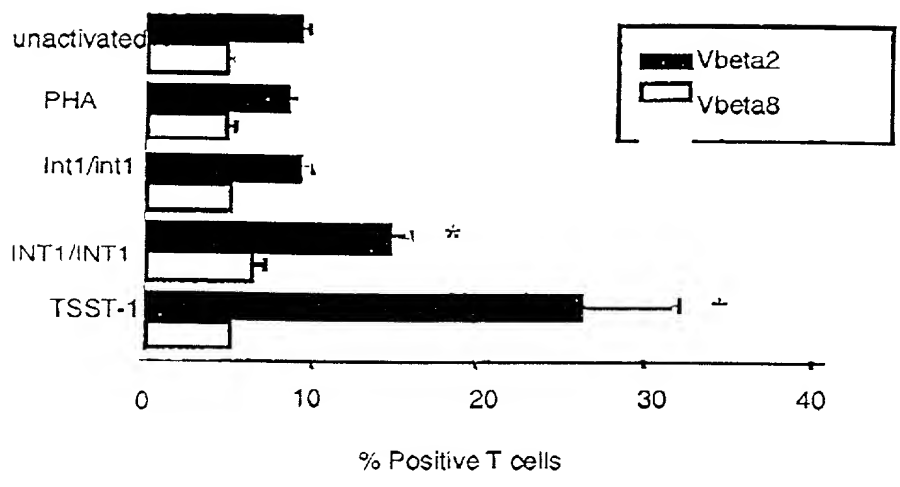


FIG 9

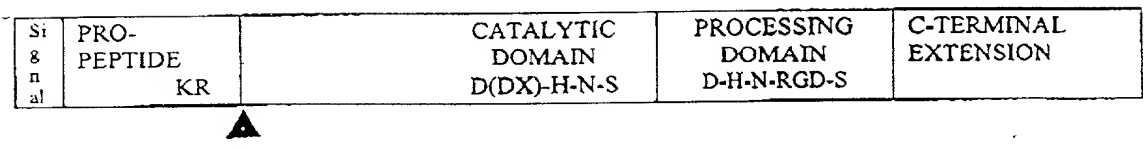


FIG. 10

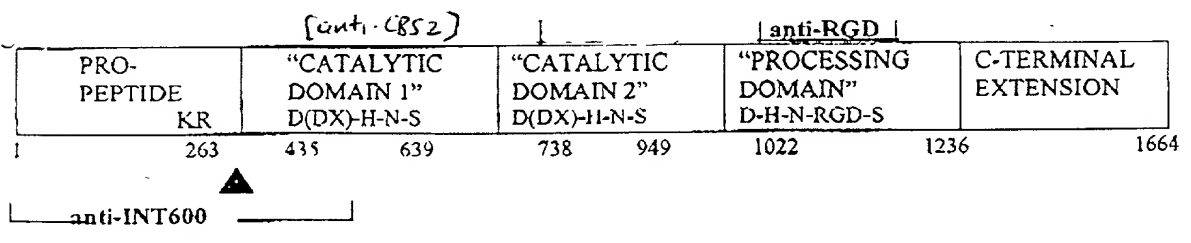


FIG. 11

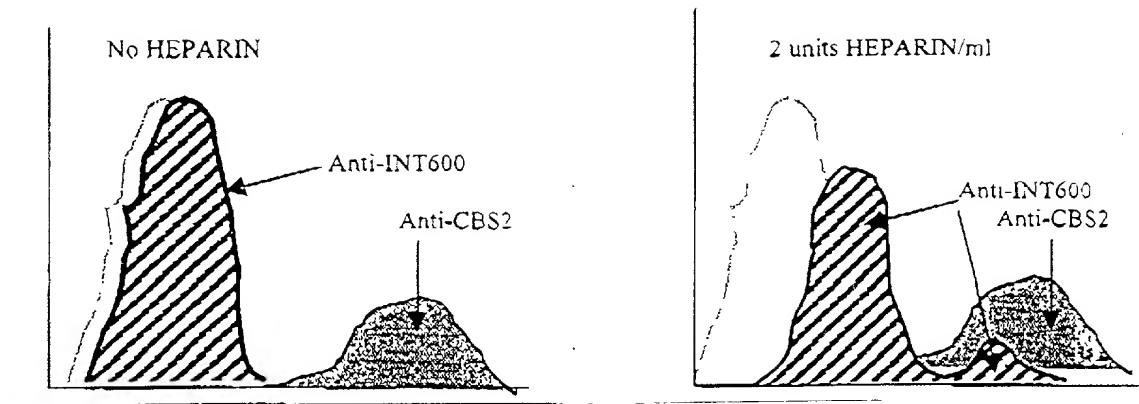


FIG. 12

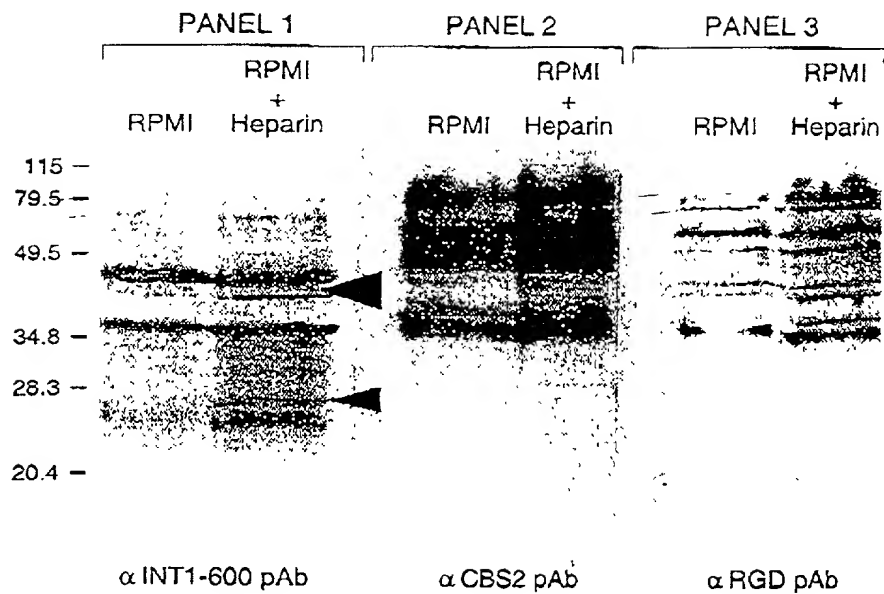


FIG. 13

SILVER STAIN

Anti 6X His WESTERN

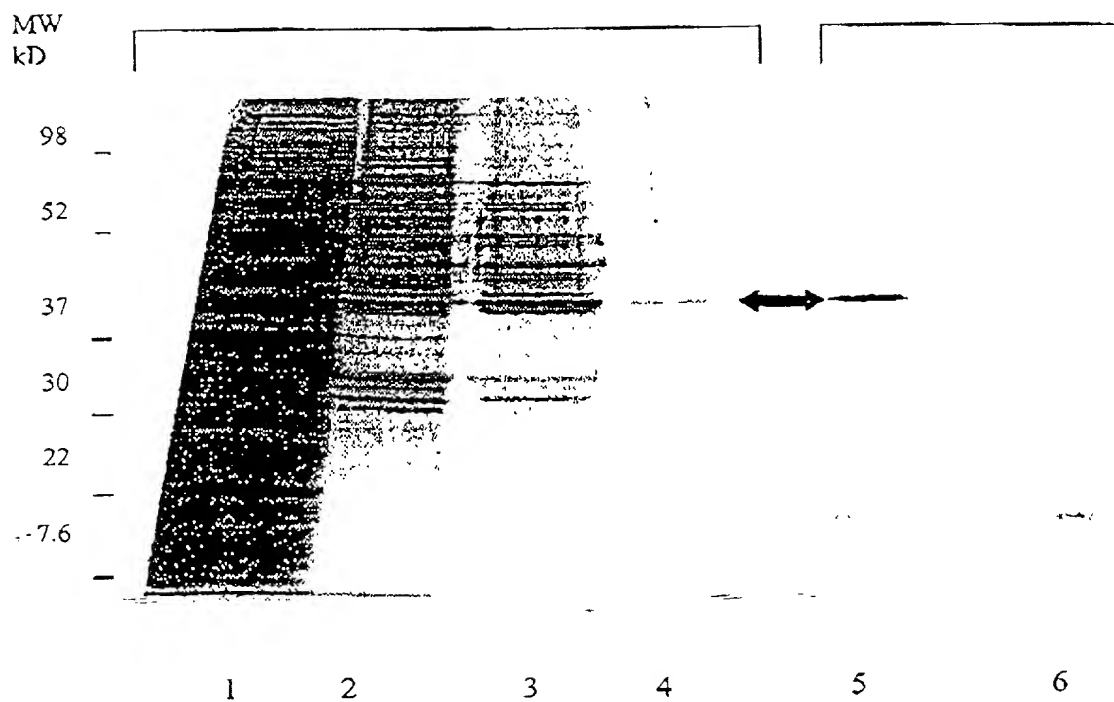


FIG. 14

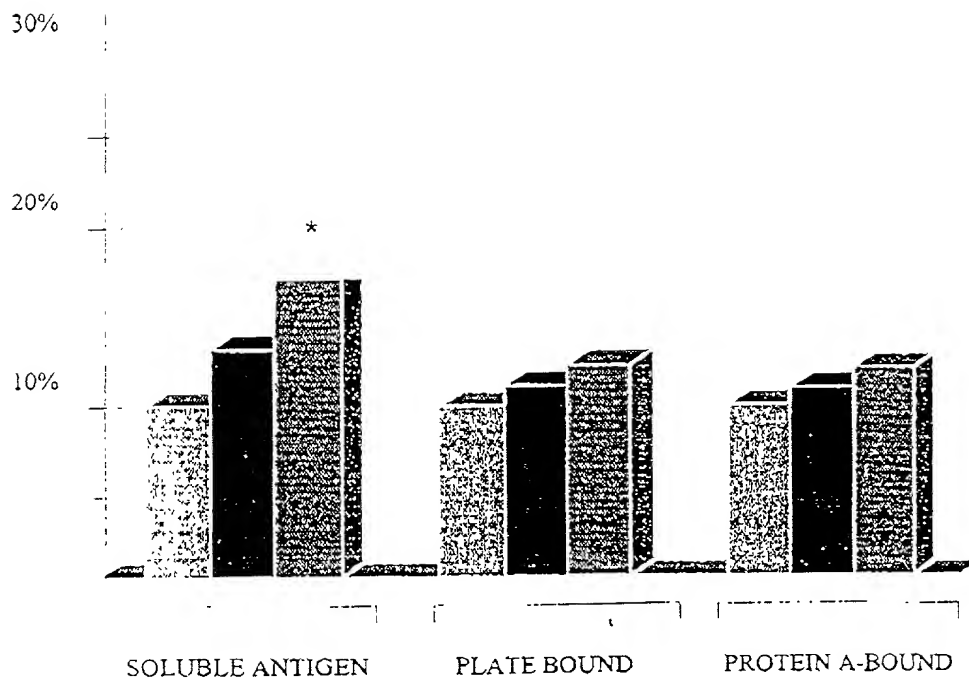


FIG 15

Model for the Participation of Intlp in Candidemia

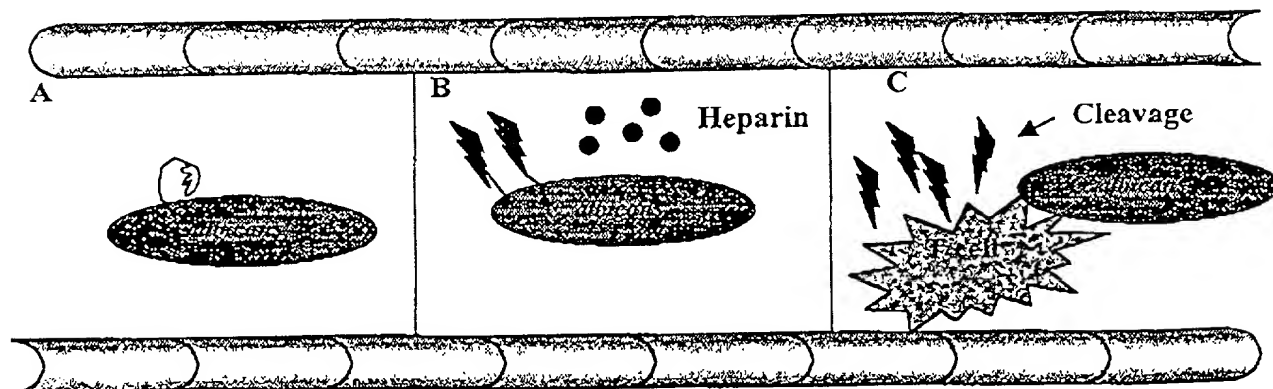


FIG. 16

MHC Class II-Binding Peptides

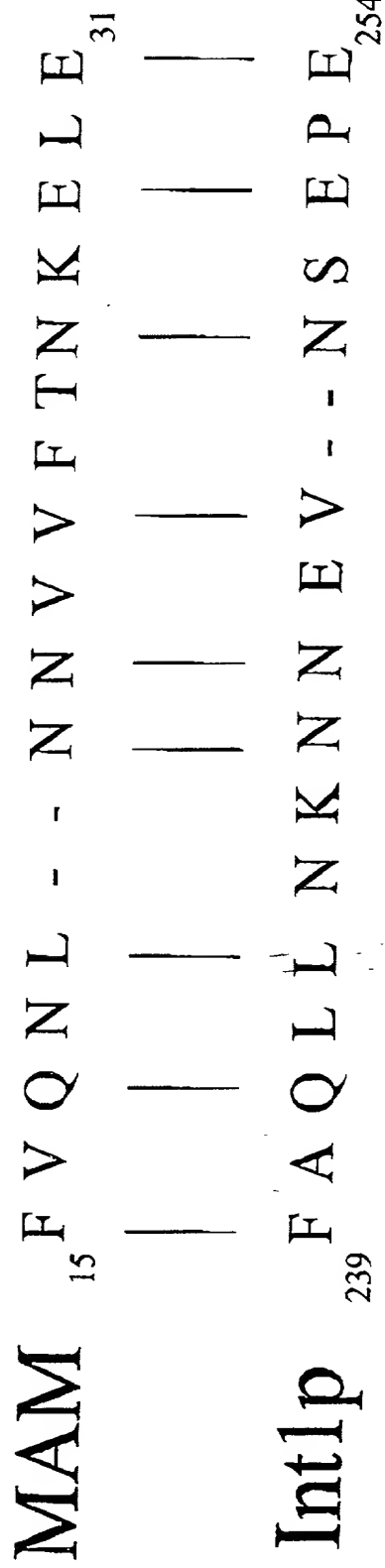


FIG. 17

FIG. 18

Linkage of T Lymphocyte to Antigen-Presenting Cell

